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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,834	08/17/2001	Kevin Robert Coffey	YOR920010658US1	4541

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HITACHI GLOBAL STORAGE TECHNOLOGIES, INC.
5600 COTTLE ROAD, NHGB-0142
SAN JOSE, CA 95193

EXAMINER	
RODRIGUEZ, GLENDA P	
ART UNIT	**PAPER NUMBER**
2651	

DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/931,834	COFFEY ET AL.	
	Examiner	Art Unit	
	Glenda P. Rodriguez	2651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueki (US Patent No. 6, 404, 713) in view of Ohmori et al. (US Patent No. 5, 182, 742).

Regarding Claim 1, Ueki teaches an assembly suitable for thermally assisted/thermal information processing control (Pat. No. 6, 404, 713; Col. 17, Line 57 to Col. 19, Line 24), the assembly comprising of a temperature sensing element for measuring/inferring the temperature of a media and a controller (Pat. No. 6, 404, 713; Col. 13, Lines 50-54 and Col. 18, Lines 52-63). Ueki fails to teach wherein the controller is responsive to the temperature sensing element and capable of inputting power based on the measured temperature. However, this feature is well known in the art as disclosed by Ohmori et al., wherein it teaches a controller that is responsive to the temperature sensing element and capable of inputting power based on the measured temperature (Pat. No. 5, 182, 742; Col. 7, Lines 4-14. Ohmori et al. teach a controller that controls the light incident in the medium.). It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify Ueki's invention in order to control the temperature in the disk for information processing control.

Regarding Claim 6, Ueki teaches an assembly comprising: A directed energy source for heating a media (Pat. No. 6, 404, 713; Fig. 9, Element 24. Ueki teaches an optical head that emits a laser light to record/reproduce in the media. It is obvious that by emitting light produces heat.), a temperature sensing element for measuring/inferring the temperature of a media and a controller (Pat. No. 6, 404, 713; Col. 13, Lines 50-54 and Col. 18, Lines 52-63). Ueki fails to teach wherein the controller is responsive to the temperature-sensing element and capable of inputting power based on the measured temperature. However, this feature is well known in the art as disclosed by Ohmori et al., wherein it teaches a controller that is responsive to the temperature sensing element and capable of inputting power based on the measured temperature (Pat. No. 5, 182, 742; Col. 7, Lines 4-14. Ohmori et al. teach a controller that controls the light incident in the medium.). It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify Ueki's invention in order to control the temperature in the disk.

Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueki (US Patent No. 6, 404, 713) and Ohmori et al. (US Patent No. 5, 182, 742), as applied to Claims 1 and 6, respectively above, further in view of Osato et al. (US Patent No. 5, 596, 555). Ueki and Ohmori et al. teach all the limitations of Claims 1 and 6, respectively. Ueki and Ohmori et al. fail to teach wherein wherein the temperature-sensing element is selected from the group consisting of a thermocouple, a thermistor, and a piezioelectric. However, this feature is well known in the art as disclosed by Osato et al., wherein it teaches that the temperature sensor could have either a thermistor or a thermocouple or another type (Pat. No. 5, 596, 555; Col. 29, Lines 5-8). Moreover, thermocouple, thermistor or any equivalent temperature

sensor are merely a substitution of a part for the same purpose. See *In re Ruff*, 256 F. 2d 590, 118 USPQ 340 (CCPA 1958). It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify Ueki and Ohmori et al.'s invention in order to provide an optional values of the reproduction laser power and magnetic field at respective inner (interior) temperature of the apparatus as suggested by Osato et al. (Pat. No. 5, 596, 555; Col. 29, Lines 1-9).

Claims 3, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueki and Ohmori et al., as applied to Claims 1 and 6, respectively above, further in view of Kenegae (US Patent No. 6, 124, 998).

Regarding Claims 3 and 8, Ueki and Ohmori et al. teach all the limitations of Claims 1 and 6, respectively. Ueki and Ohmori et al. fail to teach wherein the temperature-sensing element comprises write coils of a magnetic recording head. However, this feature is well known in the art as disclosed by Kenegae, wherein it teaches the temperature sensing element comprises write coils of a magnetic recording head (Pat. No. 6, 124, 998; Col. 6, Lines 28-36). It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify Ohmori et al.'s invention in order to supply sufficient write current to the coil.

Regarding Claim 11, Ueki and Ohmori et al.teach all the limitations of Claim 6. Ueki and Ohmori et al. fail to teach wherein the controller comprises a servo-loop, which feeds on the energy output by the energy source for adjusting the temperature of a media. However, this feature is well known in the art as disclosed by Kenegae, wherein it teaches wherein the controller comprises a servo-loop which feeds on the energy output by the energy source for

adjusting the temperature of a media (Pat. No. 6, 124, 998; Col. 6, Line 59 to Col. 7, Line 10). It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify Ohmori et al.'s invention in order to set the write current according to the temperature of the medium (Pat. No. 6, 124, 998; Col. 4, Lines 30-38).

Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueki (US Patent No. 6, 404, 713) and Ohmori et al. (US Patent No. 5, 182, 742), as applied to Claims 1 and 6, respectively above, further in view of Van Doorn et al. (US Patent No. 5, 408, 365). Ueki and Ohmori et al. teach all the limitations of Claims 1 and 6, respectively. Ueki and Ohmori et al. fail to teach wherein the temperature-sensing element comprises a magnetic resistive sensor. However, this feature is well known in the art as disclosed by Van Doorn et al., wherein it teaches wherein the temperature sensing element comprises a magnetic resistive sensor that is sensitive to temperature (Pat. No. 5, 408, 365; Col. 2, Lines 18-53). It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify Ueki and Ohmori et al.'s invention in order to control the temperature.

Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueki (US Patent No. 6, 404, 713) and Ohmori et al. (US Patent No. 5, 182, 742), as applied to Claims 1 and 6, respectively above, further in view of Kime et al. (US Patent No. 5, 247, 493). Ueki and Ohmori et al. teach all the limitations of Claims 1 and 6, respectively. Ueki and Ohmori fail to teach wherein the controller comprises an actuator selected from the group consisting of a piezioelectric actuator, an electromagnetic actuator, and an air-bearing mechanism. However, this feature is well known in the art as disclosed by Kime et al., wherein it teaches a controller comprises an actuator selected from the group consisting of a piezioelectric

actuator and an electromagnetic actuator (Pat. No. 5, 247, 493; See Abstract). It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify Ohmori et al.'s invention in order to control the driving voltage when used.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenda P. Rodriguez whose telephone number is (703)305-8411. The examiner can normally be reached on Monday thru Thursday: 7:00-5:00; alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (703)308-4825. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9000.

gpr
October 30, 2003.

DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600